

80



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/827,361	04/20/2004	Richard Carl Phelps	0120-028	2609
42015	7590	02/14/2005	EXAMINER	
POTOMAC PATENT GROUP PLLC P. O. BOX 855 MCLEAN, VA 22101			CLEARY, THOMAS J	
			ART UNIT	PAPER NUMBER
			2111	

DATE MAILED: 02/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/827,361	Applicant(s) PHELPS ET AL.	
	Examiner Thomas J. Cleary	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☒ Certified copies of the priority documents have been received in Application No. 09/787,353.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>20041215</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the Applicant regards as his invention.
2. Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.
3. Claim 1 recites the limitation "the transaction message" in Line 8. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent Number 5,375,215 to Hanawa et al. ("Hanawa").

6. In reference to Claim 1, Hanawa discloses an apparatus for a computer system comprising: a plurality of modules (See Figure 1 Numbers 110 and 120); a storage device (See Figure 1 Number 130); means for receiving read transaction requests from modules, each request including address data indicating the location of the data to be retrieved (See Column 2 Lines 46-50), and identity data indicating the source of the transaction message (See Column 2 Lines 46-55); means for sending the address data to the storage device (See Column 2 Lines 46-50); means for storing the identity data in a queue (See Column 2 Lines 51-55); means for receiving a retrieved data item from the storage device (See Column 2 Lines 56-59); means for matching the retrieved data item with the identity data at the head of the queue (See Column 2 Line 56 – Column 3 Line 2); and means for returning the retrieved data to the module identified by the matched identity data (See Column 2 Line 56 – Column 3 Line 2).

7. In reference to Claim 2, Hanawa discloses the limitations as applied to Claim 1 above. Hanawa further discloses that the apparatus is part of a computer system (See Figure 1 and Column 4 Lines 10-12).

8. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by PCT International Publication Number WO 80/01421 to Sullivan et al. ("Sullivan").

9. In reference to Claim 1, Sullivan discloses an apparatus for a computer system comprising: a plurality of modules (See Figure 2 Numbers S1-SN); a storage device (See Figure 2 Number U1); means for receiving read transaction requests from modules, each request including address data indicating the location of the data to be retrieved, and identity data indicating the source of the transaction message (See Page 6 Paragraph 2); means for sending the address data to the storage device (See Page 6 Paragraph 2); means for storing the identity data in a queue (See Page 8 Paragraph 4); means for receiving a retrieved data item from the storage device (See Page 16 Paragraph 4); means for matching the retrieved data item with the identity data at the head of the queue (See Page 16 Paragraph 4); and means for returning the retrieved data to the module identified by the matched identity data (See Page 16 Paragraph 4).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2111

11. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanawa as applied to Claim 1 above, and further in view of US Patent Number 5,838,603 to Mori et al. ("Mori").

12. In reference to Claim 3, Hanawa teaches the limitations as applied to Claim 1 above. Hanawa does not teach that the apparatus is part of an integrated circuit. Mori teaches the use of a system-on-chip in which an entire system is fabricated on a single integrated circuit (See Column 8 Lines 29-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the device of Hanawa as a system-on-chip of Mori, resulting in the invention of Claim 3, in order to improve various characteristics of the system such as the operational speed and reduce the production cost of the system (See Column 8 Lines 31-34 of Mori).

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanawa as applied to Claim 1 above, and further in view of US Patent Number 5,467,459 to Alexander et al. ("Alexander").

14. In reference to Claim 4, Hanawa teaches the limitations as applied to Claim 1 above. Hanawa does not teach that the apparatus is part of a graphics processor. Alexander teaches a graphics processor having multiple modules accessing a shared memory (See Figures 1 and 10 and Column 18 Line 63 – Column 19 Line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the graphics processor of Alexander using the shared memory system of Hanawa, resulting in the invention of Claim 4, in order to improve the throughput of access to a shared memory and to allow succeeding access requests to not wait for completion of a preceding access request (See Column 2 Lines 18-25 of Hanawa).

15. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hanawa as applied to Claim 1 above, and further in view of US Patent Number 4,517,656 to Solimeno et al. ("Solimeno").

16. In reference to Claim 4, Hanawa teaches the limitations as applied to Claim 1 above. Hanawa does not teach that the apparatus is part of a games console. Solimeno teaches a games console having multiple modules accessing a shared memory (See Figure 36 and Column 2 Lines 6-40).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct the games console of Solimeno using the shared memory system of Hanawa, resulting in the invention of Claim 5, in order to improve the throughput of access to a shared memory and to allow succeeding access requests to not wait for completion of a preceding access request (See Column 2 Lines 18-25 of Hanawa).

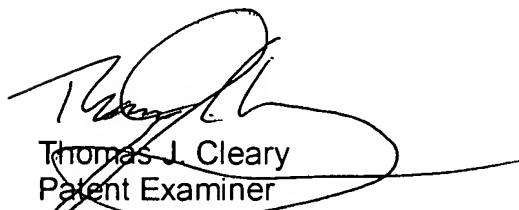
Conclusion

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Thomas J. Cleary whose telephone number is 571-272-3624. The Examiner can normally be reached on Monday-Thursday (7-3:30), Alt. Fridays (7-2:30).

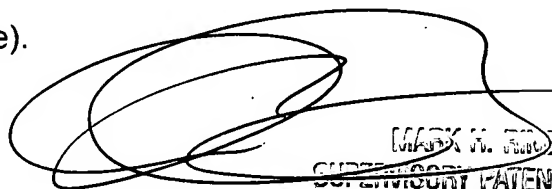
If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Mark H. Rinehart can be reached on 571-272-3632. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TJC



Thomas J. Cleary
Patent Examiner
Art Unit 2111



MARK H. RINEHART
SUPERVISOR PATENT EXAMINER
TECHNOLOGY CENTER 2100